APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/469,506	12/22/1999	MICHAEL O'DELL	UUN99001	5045

25537   7590   07/02/2003

WORLDCOM, INC.
TECHNOLOGY LAW DEPARTMENT
1133 19TH STREET NW
WASHINGTON, DC   20036

EXAMINER
NGUYEN, HANH N

ART UNIT	PAPER NUMBER
2662	

DATE MAILED: 07/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/469,506	O'DELL ET AL.
	Examiner	Art Unit	
	Hanh Nguyen	2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Application filed on 12/22/99* .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-23* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-23* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

     If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All b)☐ Some * c)☐ None of:

         1.☐ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____ .

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

     a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-8, 10-17 and 19-23 are rejected under 35 USC 103 (a) as being unpatentable

over **Brodigan** (US Pat. No. 6,473,427 B1) in view of **Lowry et al.** (US Pat. No. 5,970,066), and

further in view of **Vasamsetti et al.** (US Pat. No. 6,584,074 B1).

In claims 1, 10 and 19, **Brodigan** discloses, in Fig.1, a plurality of PC users 48 (a LAN

of user stations) coupled to CPE device 42 (CPE) communicate over 10BaseT ports (Ethernet

PPP protocol) to service providers 16, 18, 20 (remote access servers). CPE data device 42

(CPE) is coupled to the PC users for transmitting data signals (packets) to service providers

(transmitting packets by a CPE that is coupled to the LAN users). A hub 52 enables multiple PC

users in subscriber 14 to communicate to a particular service provider wherein each PC user is

assigned a corresponding PVC (simultaneously carrying point-to-point communication sessions

over a communication channel). See col.4, lines 35-40 & col.6, lines 20-25. The PC users

transmit TCP/IP packets by using Ethernet ports (generate packets by user stations based upon a

communication protocol). See col.7, lines 20-25 & Fig.3. If the CPE data device 42 is power off,

the assigned PVC is disconnected by ATM switch 72 (terminating point-to-point sessions). See

Fig.5, col.7, lines 28-35.

Brodigan does not disclose encapsulating protocol packets using Ethernet protocol;

executing a software on a user station, and forward received packets to packet switched network.

Lowry et al. discloses, in Fig.2, a CP controller 64 at a customer computer 40 (user stations)

encapsulates and decapsulates Ethernet packets (encapsulating protocol packets using Ethernet

protocol). See col.6, lines 18-22. Virtual interface card 42 (Ethernet card) comprises a processor

that executes a software module 72(executing a communication software on a user station). See

col.6, lines 45-50. Vasamsetti et al. discloses, in Fig.1, an ISP 134 that is connected to an

Internet 136 (service provider is connected to a packet switch network). See col.5, lines 30-35.

Therefore, it would have been obvious to encapsulate the packets, execute a software in

the user PC 48 of Brodigan by using the PC controller 64 and software module 72 of Lowry et

al. . The motivation is to send packets by Ethernet protocol at high speed using DSL.

In addition, it would have been obvious to connect the Internet network 136 of

Vasamsetti et al. to the Data service Provider of Brodigan to transmit received packet from

subscriber to the Packet network. The motivation is to send request at DSL transmission rate.

In claims 2 and 11, Brodigan discloses PC user 48 transmits and receives data signals to

and from CPE 42 for communicating with a selected one of service providers (point-to-point

communication). See col.4, lines 43-46.

In claims 7, 16 and 22, Brodigan discloses PC user 48 selects to be connected from a

data service provider 16 to another data service provider 18by issuing a channel request

(dynamically selecting network services). See col.5, lines 25-30.

In claims 3, 12 and 21, Brodigan does not disclose the CPE is a DSL modem. Lowry et

al. discloses a customer computer 40 (CPE) comprising a DSL modem 68 (CPE comprises a

DSL modem). See Fig.2. Therefore, it would have been obvious to modify the CPE data device

42 of **Brodigan** by adding the DSL modem 68 of **Lowry et al.** so that packet is transmitted from

CPE 42 to central device via a DSL line.

In claim 4, **Brodigan** discloses ATM PVC 28, 30 and 32 connect central office 12 to

data service providers through an ATM network 24 (a communication channel exists over ATM

network). See col.3, lines 62-67.

In claims 8, 17 and 23, **Brodigan** discloses, in Fig.3, PC users 48 transmits packet via

10BaseT port. See col. 4, lines 40-43. Therefore, it is inherent that the packet conforms with

Ethernet V2 format.

In claim 13, **Brodigan** discloses, in Fig.5, an ATM switch 72 receives packets

transmitted from subscrciber 14 via PVC pool 76 wherein the subscriber 14 comprises a plurality

of PC users (multiplexer/demultiplexer is an ATM switch). See col.7, lines 20-25.

In claims 5, 6, 14 and 15, **Brodigan** discloses CPE device 42 communicates to central

office 12 via a PVC 44 (assigning PVC to CPE). See col.4, lines 30-35. An ATM PVC 28 is

selected from pool of available PVC for communicating through ATM network 24. The selected

PVC has VPI/VCI (mapping the point-to-point communication session to distinct VPI/VCI). See

col.3, lines 60-67.

Claims 9 and 18 are rejected under 35 USC 103 (a) as being unpatentable over **Brodigan**

(US Pat. No. 6,473,427 B1) in view of **Lowry et al.** (US Pat. No. 5,970,066), in view of

Vasamsetti et al. (US Pat. No. 6,584,074 B1), and further in view of **DeNap et al.** (US Pat. No.

6490273 B1).

In claims 9 and 18, **Brodigan** does not disclose processing accounting information for each of user stations. **DeNap et al.** discloses, in Fig.6, an accounting element that collects accounting information from proxies and agents, then provides the information to the billing system (processing accounting information). See col.8, lines 30-35. Therefore, it would have been obvious to modify the data service provider of **Brodigan** by adding the accounting element of **DeNap et al.** so that accounting information of PC users is billed in accordance with the requested program.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Phillips et al. (US Pat. No. 6,243,377 B1) discloses System for Providing Simultaneous Voice and Data Transmission.

Focsaneanu et al. (US Pat. No. 5,991,292) discloses Network Access in Multi-Service Environment.

Fluss (US Pat. No. 6,304,578 B1) discloses Packet Routing and Queuing at The Headend of Shared Data Channel.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 703 306-5445. The examiner can normally be reached on Monday-Friday 8:00 AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Hassan Kizou can be reached on 703 306-4744. The fax phone numbers for the

organization where this application or proceeding is assigned are 703 872-9314 for regular

communications and 703 308-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

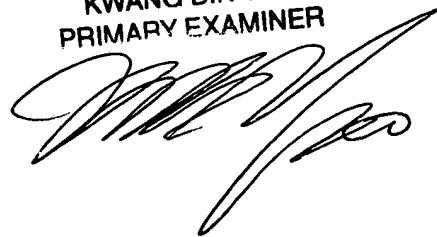should be directed to the receptionist whose telephone number is 703 305-4700.

Fax number: (703) 872-9314

KWANG BIN YAO
PRIMARY EXAMINER

Hanh Nguyen

June 27, 2003